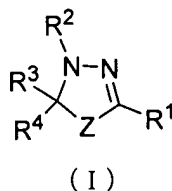


AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for therapeutic treatment of a colon cancer which comprises administering an effective amount of ~~An antitumor agent comprising a thiadiazoline derivative compound~~ represented by the general formula (I), or a pharmacologically acceptable salt thereof as an active ingredient:



<wherein

Z represents a sulfur atom; ~~or S(=O)-~~,

R¹ represents ~~substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted phenyl; aryl, a substituted or unsubstituted aromatic heterocyclic group, or C(=W)R⁵ {wherein W represents an oxygen atom or a sulfur atom, and R⁵ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,~~
~~YR⁶ {wherein Y represents an oxygen atom or a sulfur atom, and R⁶ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,~~

~~substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or~~
~~-NR⁷R⁸ [wherein R⁷ and R⁸ are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -OR⁹ (wherein R⁹ has the same meaning as that of the aforementioned R⁶), or -NR¹⁰R¹¹ (wherein R¹⁰ and R¹¹ are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R¹⁰ and R¹¹ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group), or R⁷ and R⁸ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group]];~~

R² represents

a hydrogen atom,

substituted or unsubstituted lower alkyl, or

-C(=W¹)R¹² [wherein W¹ represents an oxygen atom or a sulfur atom, R¹² represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -Y¹R¹³ (wherein Y¹ represents an oxygen atom or a sulfur atom, and R¹³ represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted c

ycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or $-NR^{14}R^{15}$ (wherein R^{14} and R^{15} are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R^{14} and R^{15} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group)), group)];

R^3 represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, and

R^4 represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted phenyl aryl, or a substituted or unsubstituted heterocyclic group, or R^3 and R^4 are combined together to represent

$-(CR^{16A}R^{16B})_{m1}-Q-(CR^{16C}R^{16D})_{m2}-$ (wherein Q represents a single bond, substituted or unsubstituted phenylene, or cycloalkylene, $m1$ and $m2$ are the same or different, and each represents an integer of 0 to 4, with the proviso that $m1$ and $m2$ are not 0 at the same time,

R^{16A} , R^{16B} , R^{16C} and R^{16D} are the same or different, and represent a hydrogen atom, halogen, substituted or unsubstituted lower alkyl, $-OR^{17}$ (wherein R^{17} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted

~~aryl, a substituted or unsubstituted heterocyclic group, $\text{CONR}^{18}\text{R}^{19}$ (wherein R^{18} and R^{19} are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R^{18} and R^{19} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group), $\text{SO}_2\text{NR}^{20}\text{R}^{21}$ (wherein R^{20} and R^{21} have the same meanings as those of the aforementioned R^{18} and R^{19} , respectively), or COR^{22} (wherein R^{22} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group)], $\text{NR}^{23}\text{R}^{24}$ [wherein R^{23} and R^{24} are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, COR^{25} (wherein R^{25} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted lower alkoxy, substituted or unsubstituted aryloxy, amino, substituted or unsubstituted lower alkylamino, di-(substituted or unsubstituted lower alkyl)amino, or substituted or unsubstituted arylamino), or SO_2R^{26} (wherein R^{26} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a~~

~~substituted or unsubstituted heterocyclic group), or R²³ and R²⁴ are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group], or -CO₂R²⁷ (wherein R²⁷ represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or R^{16A} and R^{16B}, or R^{16C} and R^{16D} are combined together to represent an oxygen atom, and when m1 or m2 is an integer of 2 or more, any of R^{16A}, R^{16B}, R^{16C} and R^{16D} may be the same or different, and any two of R^{16A}, R^{16B}, R^{16C} and R^{16D} which are bound to the adjacent two carbon atoms may combine together to form a bond}>.~~

2.- 7. (Cancelled)

8. (Currently Amended) The method ~~The antitumor agent~~ according to claim 1, wherein R² is a hydrogen atom, substituted or unsubstituted lower alkyl, or -C(=W¹)R¹² (wherein W¹ and R¹² have the same meanings as those mentioned above, respectively).

9. (Currently Amended) The method ~~The antitumor agent~~ according to claim 1, wherein R² is -C(=W¹)R¹² (wherein W¹ and R¹² have the same meanings as those mentioned above, respectively).

10. (Currently Amended) The method ~~The antitumor agent~~ according to claim [[8]] 9, wherein R¹² is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or substituted or unsubstituted cycloalkyl.

11. (Currently Amended) The method ~~The antitumor agent~~ according to claim [[8]] 9, wherein R¹² is substituted or unsubstituted lower alkyl.

12. (Currently Amended) The method ~~The antitumor agent~~ according to claim [[8]] 9, wherein R¹² is lower alkyl.

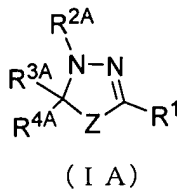
13. (Currently Amended) The method ~~The antitumor agent~~ according to claim [[8]] 9, wherein W¹ is an oxygen atom.

14. - 15. (Cancelled)

16. (Currently Amended) An ~~The~~ antitumor agent according to claim 1, wherein R³ is substituted lower alkyl.

17. - 23. (Cancelled)

24. (Currently Amended) A compound ~~thiadiazoline derivative~~ represented by the formula (IA) or a pharmacologically acceptable salt thereof:



{wherein

Z has the same meaning as that mentioned ~~above~~, above;

R¹ has the same meaning as that mentioned ~~above~~, above;

~~(A) when R¹ is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, or C(=W)R⁵ (wherein W and R⁵ have the same meanings as those mentioned above, respectively), R^{2A}, R^{3A} and R^{4A} have the same meanings as those of the aforementioned R², R³ and R⁴ (with proviso that Z^A is a sulfur atom, R¹ is benzyl, R^{2A} is acetyl, one of R³ and R^{4A} is methyl, and the other of R³ and R^{4A} is not 2-oxopropyl), respectively~~

~~—— (B) when R¹ is substituted or unsubstituted lower alkynyl, or a substituted or unsubstituted aromatic heterocyclic group, R^{2A} and R^{3A} have the same meanings as those of the aforementioned R² and R³, respectively, and R^{4A} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, and~~

~~—— (C) when R¹ is substituted or unsubstituted aryl,~~
 R^{2A} represents ~~C(=W¹)R¹² C(=W)R¹² (wherein W¹ W and R¹² have the same meanings as those mentioned above, respectively), respectively);~~

R^{3A} represents

~~-(CH₂)_kNHSO₂R^{3B} [wherein k represents an integer of 1 to 6, and R^{3B} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, or -NR^{7B}R^{8B} (wherein R^{7B} and R^{8B} have the same meanings as those of the aforementioned R⁷ and R⁸, respectively are the same or different, and represent a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -OR⁹ (wherein R⁹ represents a hydrogen atom,~~

substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or
-NR¹⁰R¹¹ (wherein R¹⁰ and R¹¹ are the same or different, and represent a hydrogen atom,
substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or
R¹⁰ and R¹¹ are combined together with the adjacent nitrogen atom to form a substituted
or unsubstituted heterocyclic group), or R⁷ and R⁸ are combined together with the
adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group)],
 -(CH₂)_kNR^{7C}R^{8C} (wherein k has the same meaning as that mentioned above, and R^{7C} and
 R^{8C} have the same meanings as those of the aforementioned R^{7B} and R^{8B} ~~R⁷ and R⁸~~,
 respectively), or
 -(CH₂)_kNHC(=O)R^{7D} (wherein k has the same meaning as that mentioned above, and R^{7D}
 has the same meaning as that of the aforementioned R^{7B}; ~~R⁷~~}, and
 R^{4A} has the same meaning as that of the aforementioned R⁴.

25.- 33. (Cancelled)

34. (Currently Amended) The compound ~~thiadiazoline derivative~~ or a
 pharmacologically acceptable salt thereof according to claim 24, wherein R^{2A} is -C(=O)R¹²
 (wherein R¹² ~~have~~ has the same meanings as those mentioned above).

35. (Currently Amended) The compound ~~thiadiazoline derivative~~ or a pharmacologically acceptable salt thereof according to claim 34, wherein R¹² is lower alkyl.

36.- 37. (Cancelled)

38. (Withdrawn - Currently Amended) The compound ~~thiadiazoline derivative~~ or a pharmacologically acceptable salt thereof according to claim 24, wherein R^{3A} is - (CH₂)_kNHSO₂R^{3B} (wherein k and R^{3B} have the same meanings as those mentioned above, respectively).

39. - 41. (Cancelled)

42. (Currently Amended) The compound ~~thiadiazoline derivative~~ or a pharmacologically acceptable salt thereof according to claim 24, wherein R^{4A} is phenyl.

43. (Currently Amended) A medicament comprising the compound ~~thiadiazoline derivative~~ or a pharmacologically acceptable salt thereof according to claim 24 as an active ingredient.

44. - 47. (Cancelled)

48. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the compound ~~thiadiazoline derivative~~ or a pharmacologically acceptable salt thereof according to claim 1.

49. - 50. (Cancelled)

51. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the compound ~~thiadiazoline derivative~~ or a pharmacologically acceptable salt thereof according to claim 24.

52. (Cancelled)

53. (Currently Amended) A method for therapeutic ~~and/or preventive~~ treatment of a colon cancer malignant tumor which comprises administering an effective amount of the compound ~~thiadiazoline derivative~~ or a pharmacologically acceptable salt thereof according to claim 24.

54. - 56. (Cancelled)